

What is claimed is:

1. An image-processing method comprising the steps of:

reconstructing an image which has a resolution
5 differing from a reference-resolution, based on an image signal
subjected to a multiple-resolution transformation process; and
calculating an image-processing parameter, based on
a reference-processing parameter employed in performing a
predetermined image-processing process on a reference-
10 resolution image having said reference resolution, said
image-processing parameter being employed in performing said
predetermined image-processing process on the reconstructed
image and causing the image characteristics of said
reconstructed image subjected to said predetermined image-
15 processing process to be substantially the same as the image
characteristics of said reference-resolution image subjected
to said predetermined image-processing process.

2. The image-processing method as set forth in claim
1, wherein said image signal is subjected to said multiple-
20 resolution transformation process so that the resolution of each
image is 2^k (where k is an integer) times that of said
reference-resolution, and the image-size of each image is 2^{2k}
times the image-size of said reference-resolution image; and

said reconstructed image is an image having a
25 resolution which does not fall within the 2^k times range of said
reference-resolution.

3. The image-processing method as set forth in claim 1, wherein said reconstructed image subjected to said predetermined image-processing process is further converted to an image having a desired image-size.

5 4. The image-processing method as set forth in claim 2, wherein said reconstructed image subjected to said predetermined image-processing process is further converted to an image having a desired image-size.

10 5. The image-processing method as set forth in claim 2, wherein said reconstructing is performed so that the image-size of said reconstructed image is 2^{2k} times the image-size of said reference-resolution image, close to the image-size of an image which is to be reproduced and output as a visible image; and

15 an image subjected to said predetermined image-processing process is further subjected to a zoom process so that it becomes equal in size to the image-size of said output image.

20 6. The image-processing method as set forth in claim 1, wherein said reference-processing parameter is stored in correlation with said image signal.

7. The image-processing method as set forth in claim 2, wherein said reference-processing parameter is stored in correlation with said image signal.

25 8. The image-processing method as set forth in claim 3, wherein said reference-processing parameter is stored in

correlation with said image signal.

9. The image-processing method as set forth in claim 5, wherein said reference-processing parameter is stored in correlation with said image signal.

5 10. The image-processing method as set forth in claim 1, wherein said image-processing parameter is calculated based on the characteristic of said multiple-resolution transformation process.

10 11. The image-processing method as set forth in claim 2, wherein said image-processing parameter is calculated based on the characteristic of said multiple-resolution transformation process.

15 12. The image-processing method as set forth in claim 3, wherein said image-processing parameter is calculated based on the characteristic of said multiple-resolution transformation process.

20 13. The image-processing method as set forth in claim 5, wherein said image-processing parameter is calculated based on the characteristic of said multiple-resolution transformation process.

14. The image-processing method as set forth in claim 6, wherein said image-processing parameter is calculated based on the characteristic of said multiple-resolution transformation process.

25 15. An image-processing system comprising:
reconstruction means for reconstructing an image

which has a resolution differing from the reference-resolution, based on an image signal subjected to a multiple-resolution transformation process;

image-processing means for performing a
5 predetermined image-processing process on the reconstructed image; and

parameter-setting means for deriving an image-
processing parameter, based on a reference-processing parameter employed in performing a predetermined image-processing process on a reference-resolution image having said reference-
10 resolution, and setting the derived image-processing parameter to said image-processing means, said image-processing parameter being employed in performing said predetermined image-
processing process on said reconstructed image and causing the
15 image characteristics of said reconstructed image subjected to said predetermined image-processing process to be substantially the same as the image characteristics of said reference-resolution image subjected to said predetermined image-
processing process, approximately the same.

20 16. The image-processing system as set forth in claim 15, wherein said image signal is subjected to said multiple-resolution transformation process so that the resolution of each image is 2^k (where k is an integer) times that of said reference-resolution and an image-size of each image
25 is 2^{2k} times that of the image-size of said reference-resolution image; and

said reconstruction means obtains said reconstructed image having a resolution not falling within the 2^k times range of said reference-resolution.

17. The image-processing system as set forth in claim 15, further comprising zoom-processing means for further converting said reconstructed image subjected to said predetermined image-processing process, to an image having a desired image-size.

18. The image-processing system as set forth in claim 16, further comprising zoom-processing means for further converting said reconstructed image subjected to said predetermined image-processing process, to an image having a desired image-size.

19. The image-processing system as set forth in claim 16, wherein said reconstruction means reconstructs an image so that the image-size of said image is 2^{2k} times the image-size of said reference-resolution image, close to the image-size of an image which is reproduced and output as a visible image; and

zoom-processing means is further provided for performing a zoom process on an image subjected to said predetermined image-processing, so that it becomes equal in size to the image-size of said output image.

20. The image-processing system as set forth in claim 15, wherein said parameter-setting means derives said image-processing parameter, based on the characteristic of said multiple-resolution transformation process.

21. The image-processing system as set forth in claim 16, wherein said parameter-setting means derives said image-processing parameter, based on the characteristic of said multiple-resolution transformation process.

5 22. The image-processing system as set forth in claim 17, wherein said parameter-setting means derives said image-processing parameter, based on the characteristic of said multiple-resolution transformation process.

10 23. The image-processing system as set forth in claim 19, wherein said parameter-setting means derives said image-processing parameter, based on the characteristic of said multiple-resolution transformation process.

24. A computer readable storage medium recording a program to be executed by a computer, said program comprising:

15 a procedure for reconstructing an image having a resolution differing from the reference-resolution, based on an image signal subjected to a multiple-resolution transformation process;

20 a procedure for calculating an image-processing parameter, based on a reference-processing parameter employed in performing a predetermined image-processing process on a reference-resolution image having said reference-resolution, said image-processing parameter being employed in performing said predetermined image-processing on said reconstructed image
25 and causing the image characteristics of said reconstructed image subjected to said predetermined image-processing to be

substantially the same as the image characteristics of said reference-resolution image subjected to said predetermined image-processing; and

a procedure for performing said predetermined
5 image-processing process on said reconstructed image by use of said image-processing parameter.

25. The storage medium as set forth in claim 24,
wherein said image signal is subjected to said multiple-
resolution transformation process so that the resolution of each
10 image is 2^k (where k is an integer) times that of said reference-resolution, and the image-size of each image is 2^{2k} times that of the image-size of said reference-resolution image;
and

said reconstructing procedure is a procedure for
15 obtaining said reconstructed image having a resolution not falling within the 2^k times range of said reference-resolution.

26. The storage medium as set forth in claim 24
further comprising a procedure of further converting said
reconstructed image subjected to said predetermined image-
20 processing process, to an image having a desired image-size.

27. The storage medium as set forth in claim 25
further comprising a procedure of further converting said
reconstructed image subjected to said predetermined image-
processing, to an image having a desired image-size.

28. The storage medium as set forth in claim 24,
wherein said reconstructing means is a procedure of

reconstructing an image so that the image-size of said image is 2^{2k} times the image-size of said reference-resolution image, close to the image-size of an image to be reproduced and output as a visible image; and

5 a zooming procedure is further provided for performing a zoom process on an image subjected to said predetermined image-processing, so that it becomes equal in size to the image-size of said output image.

29. The storage medium as set forth in claim 24,
10 wherein said parameter calculating procedure is a procedure of calculating said image-processing parameter, based on the characteristic of said multiple-resolution transformation process.

30. The storage medium as set forth in claim 25,
15 wherein said parameter calculating procedure is a procedure of calculating said image-processing parameter, based on the characteristic of said multiple-resolution transformation process.

31. The storage medium as set forth in claim 26,
20 wherein said parameter calculating procedure is a procedure of calculating said image-processing parameter, based on the characteristic of said multiple-resolution transformation process.

32. The storage medium as set forth in claim 28,
25 wherein said parameter calculating procedure is a procedure of calculating said image-processing parameter, based on the

characteristic of said multiple-resolution transformation process.